

Product data sheet

Characteristics

RXG12BD

Harmony, Interface plug-in relay, 10 A, 1 CO, with LED, with lockable test button, 24 V DC



Main

Range of product	Harmony Electromechanical Relays
Series name	Interface relay
Product or component type	Plug-in relay
Device short name	RXG
Contacts type and composition	1 C/O

Complementary

Status LED	With
Contacts material	Silver alloy (AgSnO ₂ In ₂ O ₃)
Maximum contact resistance	100 mOhm
[I _{th}] conventional enclosed thermal current	10 A at -40...55 °C
[I _e] rated operational current	10 A at 30 V (DC) conforming to UL 10 A at 30 V (DC) conforming to IEC 10 A at 250 V (AC) conforming to IEC 10 A at 250 V (AC) conforming to UL
Maximum switching voltage	250 V AC 30 V DC
Load current	10 A at 250 V AC
Maximum switching capacity	2500 VA
Minimum switching capacity	500 mW at 100 mA, 5 V DC
Operating rate	<= 1800 cycles/hour under load <= 18000 cycles/hour no-load
Utilisation coefficient	20 %
Mechanical durability	10000000 cycles
Electrical durability	100000 Cycles for NO resistive load at 55 °C 100000 cycles for NC resistive load at 55 °C
[U _i] rated insulation voltage	250 V conforming to IEC 300 V conforming to CSA 300 V conforming to UL
[U _{imp}] rated impulse withstand voltage	6 kV 1.2/50 μs
Dielectric strength	1000 V AC between contacts with micro disconnection 5000 V AC between coil and contact with reinforced insulation
Coil resistance	1100 Ohm +/- 10 %
Insulation resistance	1000 MOhm at 500 V DC
Test levels	Level A group mounting
Mounting position	Any position
Drop-out voltage threshold	>= 0.1 U _c DC
Coil insulation class	Class F
Operate time	20 ms
Release time	20 ms
[U _c] control circuit voltage	24 V DC

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Safety reliability data	B10d = 100000
Colour of cover	Standard
Control type	Lockable test button
Local signalling	Flag
Torque value	0.8 N.m
Product weight	0.02 kg
Device presentation	Complete product



Environment

Vibration resistance	3 gn, amplitude = +/- 0.75 mm (f = 10...150 Hz)in operation 5 gn, amplitude = +/- 0.75 mm (f = 10...150 Hz)not in operation
IP degree of protection	IP40
Shock resistance	20 gn in operation 100 gn not in operation
Protection category	RT I
Standards	IEC 61810-1 CSA C22.2 No 14 UL 508
Product certifications	EAC CSA CE UL
Pollution degree	2
Overvoltage category	III
Ambient air temperature for storage	-40...85 °C
Ambient air temperature for operation	-40...70 °C
Relative humidity	10...85 %

Packing Units

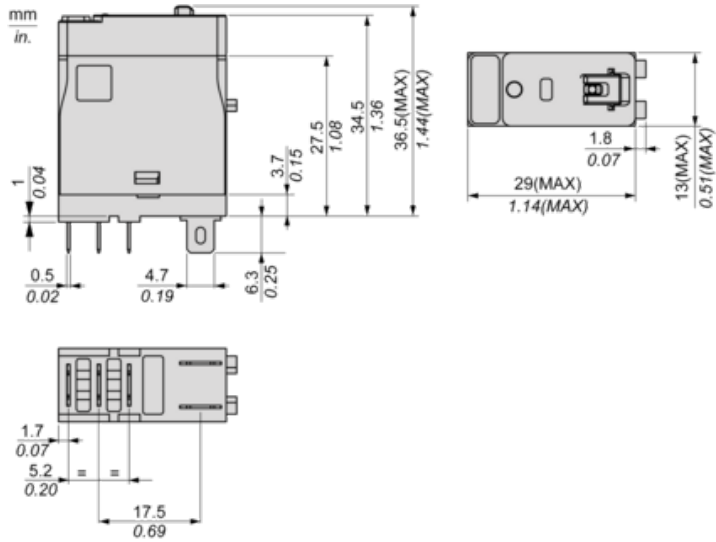
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	20.87 g
Package 1 Height	28.9 mm
Package 1 width	12.7 mm
Package 1 Length	34.52 mm
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Weight	408.7 g
Package 2 Height	3.45 cm
Package 2 width	9.15 cm
Package 2 Length	8.2 cm
Unit Type of Package 3	PAL
Number of Units in Package 3	12800
Package 3 Weight	291.904 kg
Package 3 Height	105 cm
Package 3 width	80 cm
Package 3 Length	120 cm

Offer Sustainability

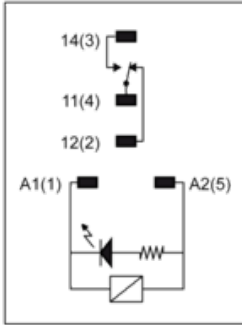
Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes

RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile

Dimensions

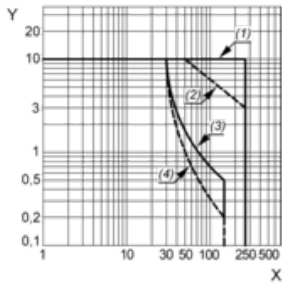


Wiring Diagram



Performance Curves

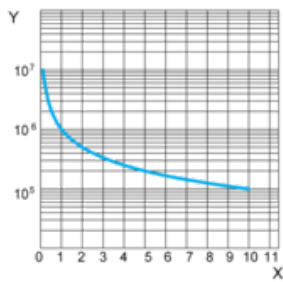
Maximum Switching Capacity



- X : Switching voltage (V)
- Y : Switching current (A)
- (1) AC Resistive Load
- (2) AC Inductive Load $\cos(\phi)=0.4$
- (3) DC Resistive Load
- (4) DC Inductive Load ($L/R=7\text{ms}$)

Life Expectancy

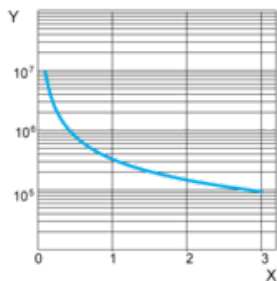
Resistive Load



- X : Contact Current (A)
- Y : Operating Cycle Number

Life Expectancy

Inductive Load

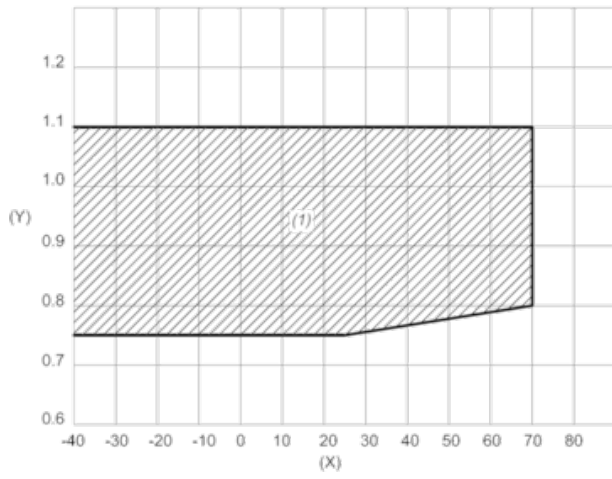


- X : Contact Current (A)
- Y : Operating Cycle Number

NOTE: These are typical curves, actual durability depends on load, environment, duty cycle, etc.

Coil Operating Range

DC Coil Operating Range VS Ambient Temperature



X : Ambient temperature (°C)

Y : Coil voltage (U/Uc)

(1) Permitted operating range area